Somatic Reactions by Emotional Affects, and Camouflaged Syndrome

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Introduction

A clinician cannot treat the patient by separating his psychic and somatic aspects, and so I engage in my daily medical profession with a belief that the body and the mind cannot be separated.

I hold the view that in some internal diseases, the participation of the emotional affect should be given due to consideration. However, since I have not obtained so far even a single datum that proves that a psychic disorder alone has given rise to a somatic illness, I entertain a doubt in the existence of the psychosomatic disease as such aside from pure psychoneurosis. On the other hand, I believe that psychosomatic medicine is necessary if we are to examine a disease thoroughly and treat a patient properly.

I would like to take up here the different problems that are common to the different considerations which the clinicians in general show to both the psychic and the somatic phase of the patient in their actual practice and to the ways how these two phases are handled in actuality. These problems comprise the two following aspects.

1) Psychosomatic study of problems that are common to internal diseases in general, especially relationship between emotional affect and somatic reaction.

2) Study of diseases treated in general as psychosomatic disorders, especially camouflaged syndromes I advocate.

On emotional affect and somatic reaction

It is well known empirically that a man is influenced in various ways by the change in his environment or emotions and produces somatic reactions accordingly, irrespective of whether he is ill or not. To clarify how the emotional changes which we frequently encounter in our daily life would bring about the changes in our somatic functions would be an important point in understanding the relationship between internal diseases in general and psy-
chosomatic medicine. Since I have studied what kind of somatic reactions would be aroused by unpleasant emotions in healthy people, hypertensive and diabetic patients by centering my research on the pituitary-adrenal system, I will describe my findings briefly.

The biggest problem is how the subject takes the emotional stress made to bear on him. In conducting the research, I employed the four methods mentioned in Table 1 by obtaining them from clinical reports on animal psychology. As healthy subjects, I employed high school boys. After showing them a movie, I made them fill a questionnaire and confirmed how the film aroused different emotional affects in them. Experimentally, I conducted a research on animal psychology by using rats as subjects and confirmed that emotional affects were clearly aroused in them. The findings of these researches have already been published. The American scholars too have also recognized that this experiment which uses rats and cats to see if emotional affects are aroused in rats is by no means meaningless, and I believe our method will be appraised highly in future too depending upon the way it will be utilized.

I have noted that chemocorticoids in blood plasma tend to show a temporary rise when healthy students are taking an year end examination or are shown a stressful movie. It was also revealed that the excretion of adrenalin-like substance would rise when these students are subjected to the same kind of condition as mentioned above or are given unpleasant suggestions under hypnosis. It was also disclosed that when the students are placed under the similar condition as mentioned above or when the nurses are given suggestions that create an emotional tension in them, their circulating eosinophils show a significant decrease. All this seems to tell us that an emotional affect causes a transitory hyperactivity of the adrenal function.

On the other hand, when we conduct an experiment of "setting a cat on a rat," we can assume that a reversible hyperactivity of the function of the adrenal cortex is aroused in a rat under such a condition. This assumption can be reached from the decrease in the number of circulating eosinophils and lymphocytes, depression of the adrenal ascorbic acid and the histochemical

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Table 1. Methods of Observations about Emotional Stress and Somatic Reaction

1. Observations in human beings
   a. Emotional environment (examination for student)
   b. Suggestion under hypnosis (suggestion method)
   c. Showing of stressful movie (movie method)
2. Observations in animal
   a. Method of "setting cat on rats" (setting method)
findings of the adrenal tissue, when we made the observation with due consideration to the time allowed for the stressful load to manifest itself. These findings have already been reported.

The above are only a part of the clinical findings of healthy or normal persons and of results obtained with animal experiments. Next, I would like to mention briefly a few somatic reactions caused by emotional stress when a person is sick, because I presume this is of greatest interest and concern to the internist.

We doctors tend to try to guide hypertensive patients with directive advices like "don't be afraid of your blood pressure" or "you need not worry about it," by using these expressions more or less as a habit. These advices are given because a complication might appear if a patient is apprehensive of his condition or if he is placed under psychic stress. But it must be noted that these advices are liable to implant in the patient a false impression that emotional affects like fear or anxiety would actually create hypertension.

Experimentally we have found that "setting a cat on a rat" does not create hypertension by itself. However, when we give a high salt diet to the rat and then "set a cat on it," we will notice that hypertension is caused by a high salt diet alone and that it is aggravated when a "cat is set on a rat," showing that the combination of the two factors is more effective in creating hypertension. This has suggested that an emotional stress promotes or helps the creation of hypertension.

In the case of human beings, a patient who is already suffering from a chronic hypertensive state is very sensitive to an emotional stress and tends to present a transitory rise in blood pressure when exposed to such a stress, as can be surmised from the animal experiment. But it must be noted here that an emotional stress alone cannot create a lasting hypertensive state in people with normal blood pressure.

Since the patients of true diabetes mellitus of a medium degree are handy in observing objectively the somatic reactions to an emotion, I showed them a stressful movie and conducted a sugar tolerance test by giving sugar by mouth at the same time. The fluctuations of the blood sugar revealed that with healthy persons who were used as controls, the fluctuation was about the same whether they were shown the stressful movie or not but that with the diabetics, the blood sugar value clearly showed a drop in the curve two hours after they were shown the stressful movie, although it remained high if the movie was not shown. From this finding, we can at least say that the assimilative power has not been diminished by an unpleasant emotion. There is a need to study in future whether it is right and proper to conclude in an easy-going manner that worries, anxieties and fears all have an ill effect on a disease. On the other hand, with hyperthyroidists, similar stresses have an
ill effect on the disease and tend to raise the PBI value in blood plasma temporarily as compared with that of healthy people.

If we study the relationship between emotional affects and somatic reactions, we can say that even a slight emotional stress causes all sorts of somatic reactions and that the somatic reactions that are created in the patients cannot always be inferred from those manifested by healthy people.

On camouflage syndrome

In actual clinical practice, we often come across cases which are difficult to handle because we cannot pinpoint the cause. They are a group of patients who present strongly to the fore different symptoms that resemble those of neurosis, to make it difficult for the doctor to determine the underlying somatic illness. For convenience sake, I have given the name of camouflage syndrome to the group of diseases that are camouflaged by psychoneurotic symptoms and have reported a number of times from 1952 citing actual cases as examples. Their treatment differs from that of simple neurosis in that priority is given to the treatment of the underlying somatic disease, which is supplemented with psychotherapy given in accordance with the need.

This group of patients are by no means small in number and comprise 10.2% of all the ambulatory and hospitalized patients of our clinic. And it is to be noted that there is a great variety to these diseases that are hidden under neurotic symptoms.

When we conduct the Yatabe-Guilford Test to these camouflage syndrome patients, we notice that the majority of them present a profile descending to the left similar to that of neurotic patients and quite different from that of healthy people or that of patients suffering from somatic diseases with outspoken symptoms. The Cornell Medical Index of these camouflage syndrome patients also show a pattern similar to that of neurotic patients but quite different from that presented by the healthy group or the true somatic disease group. All these findings are interesting, but at the same time they tell us that when we treat a patient, we should not forget to pursue the existence of an underlying somatic illness accurately without being deceived by subjective complaints.

When the somatic disease that is camouflage is tuberculosis, I advocate that it be called "camouflage tuberculosis" and have already reported on this subject till now. Since many of these camouflage tuberculosis patients complain of asthenopia, I have studied their fundus of the eye and detected chronic postocular neuritis of a marked degree in a significant number of them. To study the ground of this finding, I have inoculated the rats with BCG and examined histologically their optic nerves at different stages. With this re-
search, I have found that the inflammatory changes appear gradually as early as 24 hours after inoculation, become marked by the 14th day and diminish to a slight degree by the 45th day to present the recovery process. This fact emphasizes the need for studying carefully even the smallest subjective complaint without ignoring it when we are to treat a patient clinically. It also demands that the patient be examined with due consideration to his dual aspects of the mind and the body.

**Conclusion**

I am of the belief that psychosomatic medicine will contribute to the examination and treatment of internal diseases only in so far as the following are observed:

1. When the best doctor-patient relationship is maintained.
2. When consideration is given to the fact that each patient lives in a different environment and has a different personality and hence would manifest reactions different from all others.
3. When a somatic disease is not denied or ignored even if psychoneurotic symptoms are quite manifest.